

SUMMARY OF RESPONSE

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The Examiner states: “Claims 10, 12-13, 18 and 20-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 10, line 5; applicant recites the feature “dimples in direct contact with the heating surface of the heating device”. The specification only teaches dimples such that it’s meaning to one of ordinary skill in the art is an indentation or a depression on a surface. It is not clear how an indentation or a depression can be in direct contact with the heating surface? Clarification is needed to understand the meaning of claim 10. The same applies to claim 18.

In claim 12, line 2; applicant recites the feature “dimples each have a height between about 1 mil and about 24 mils”. Again, it is not clear how an indentation or a depression can have a height? Clarification is needed to understand the meaning of claim 12. The same applies to claim 13.

In claim 20, lines 3-4; applicant recites the feature “dimples extending therefrom and in direct contact with a heating surface in an insecticidal vaporizer”. Again, it is not clear how a depression can be extending and in direct contact with a heating surface?

Clarification is needed to understand the meaning of claim 10. The same applies to claim 20. The same applies to claim 21.

In claim 22, line 2; applicant recites the feature ‘dimples extend completely over the exterior

bottom surface.” The meaning of this limitation is not clear. Does the applicant mean that dimples cover the exterior bottom surface of the container or dimples extending from the exterior bottom surface of the container? Clarification is needed to understand the meaning of claim 22.”

Claim Rejections - 35 USC § 103

2. The Examiner states: “The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.”

3. The Examiner states: “Claims 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flashinski et al (U.S.P.N. 6,031,967) in view of Barnhart (U.S.P.N. 6,413,476) and further in view of Schiebelhuth (U.S.P.N. 5,283,854).

With respect to claims 10, 18 and 20-21, the Flashinski reference teaches a heat-regulating container (14) for dispensing insecticides (26) into an atmosphere including the following: a heat-regulating container (14) having a flat reservoir with insecticide (22), an interior bottom surface with interior side walls (unlabeled inner surface of 22), exterior outer surface of a lower surface (32), the interior surface of the lower surface (unlabeled inner surface of 22) of the reservoir portion (22). See col.4, lines 34-37, which teaches that the entire container is made from one

piece with projections in figure 5 extending from the interior surface of the unlabeled lower surface of the container. The reservoir having a plurality of leg-like projections (col.4, lines 21-23), a heating device (10) with a heating surface (12) at elevated temperature adapted to receive the heat-regulating container (14) and the leg-like projections defining several air gaps (col.4, lines 34-37) between the lower surface of the reservoir portion and the heating surface of the heating device (10) for regulating heat transfer from the heating surface (figure 4: 12) to the volatile material (figure 4:26). The Flashinski reference teaches convective heating, but fails to disclose that the leg-like projections are in direct contact with a heating surface and the exterior surface of the bottom is dimpled. The Barnhart reference discloses a container (3) whose bottom surface is in direct contact with the heating surface (6) in order to regulate the heat transfer from the heating surface to the volatile material (102) in the container. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the known convective heating means of the Flashinski reference with the known conductive heating means of the Barnhart reference since such a substitution makes the heating surface closer to the insecticide material for faster dispensing.

With respect to claims 10, 18 and 20-21, the Barnhart reference fails to teach that exterior surface of the bottom of the container is dimpled; however, the Schiebelhuth reference, which is in the art of regulating direct heat for heating container, teaches a container (figure 3: 9) that its exterior bottom surface includes an indentation, i.e., a dimple (figure 3: 23). In addition, if one to look upside down at figure 1, of the Schiebelhuth reference, then 23 is a dimple. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the container of the of the Flashinski reference by substituting the leg-like projections in the bottom of the container with indentations, i.e., dimples as taught by Schiebelhuth reference so that the spatial arrangement of the abutment surface and the electric heating element are not

congruent (col.8, lines 29-43).

With respect to claim 11, the Flashinski reference and the Barnhart reference both fail to that the exterior surface of the bottom is dimpled. The Schiebelhuth reference, which is in the art of regulating direct heat for heating container, teaches a container (figure 3: 9) that its exterior bottom surface includes an indentation, i.e., a dimple (figure 3: 23). In addition, if one to look upside down at figure 1 of the Schiebelhuth reference, then 23 is a dimple. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the container of the of the Flashinski reference by substituting the leg-like projections in the bottom of the container with an indentation, i.e., dimple as taught by Schiebelhuth reference so that the spatial arrangement of the abutment surface and the electric heating element are not congruent (col.8, lines 29-43).

With respect to claims 12-13, the Flashinski reference and the Barnhart reference both fail to disclose that the exterior surface of the bottom is dimpled. The Schiebelhuth reference, which is in the art of regulating direct heat for heating container, teaches a container (figure 3: 9) that its exterior bottom surface includes an indentation, i.e., a dimple (figure 3: 23). The indentation (figure 3: 22) has an intrinsic height such that the numbers and the heights of the dimples is a matter of design choice that is well within the scope of the artisan, In addition, if one to look upside down at figure 1, of the Schiebelhuth reference, then 23 is a dimple. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the container of the of the Flashinski reference by substituting the leg-like projections in the bottom of the container with indentations, i.e., dimples as taught by Schiebelhuth reference so that the spatial arrangement of the abutment surface and the electric heating element are not congruent (col. B, lines 29-43).

With respect to claims 14-16, the Flashinski reference teaches the following: the closure means includes an impermeable film (col.3, lines 4-5), the closure means includes a semi permeable membrane (col.2, line 65) and the closure means includes a permeable membrane (col.2, line 65).

With respect to claim 17, the Flashinski reference teaches the container (22) includes a volatile insecticide material (26).

With respect to claim 19, the Flashinski reference and the Barnhart reference both fail to that the exterior surface of the bottom of the container is dimpled. The Schiebelhuth reference, which is in the art of regulating direct heat for heating container, teaches a container (figure 3: 9) that its exterior bottom surface includes an indentation, i.e., dimple (figure 3: 23). In addition, if one to look upside down at figure 1, of the Schiebelhuth reference, then 23 is a dimple. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the container of the of the Flashinski reference by substituting the leg-like projections in the bottom of the container with indentations, i.e., dimples as taught by Schiebelhuth reference so that the spatial arrangement of the abutment surface and the electric heating element are not congruent (col.8, lines 29-43).

With respect to claim 22, the Flashinski reference teaches a series (uniformly-distributed) of leg-like projections (in col.4, lines 21-23) such that the projections (30) extend from completely over the exterior bottom surface (32), but fails to teach that the exterior surface of the bottom of the container is dimpled. The Barnhart reference discloses a flat bottom container and fails to teach that the exterior surface of the bottom of the container is dimpled. The Schiebelhuth reference, which is in the art of regulating direct heat for heating container, teaches a container (figure 3: 9) that its exterior bottom surface includes an indentation, i.e., dimple (figure 3: 23). In addition, if

one to look upside down at figure 1, of the Schiebelhuth reference, then 23 is a dimple. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the container of the of the Flashinski reference by substituting the leg-like projections in the bottom of the container with indentations, i.e., dimples as taught by Schiebelhuth reference so that the spatial arrangement of the abutment surface and the electric heating element are not congruent (col.8, lines 29-43).”

4. The Examiner states: “Claims 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flashinski et al (U.S.P.N. 6,031,967) in view of Encyclopedia Britannica Online and further in view of Schiebelhuth (U.S.P.N. 5,283,854).

With respect to claims 10, 18 and 20-21, the Flashinski reference teaches a heat-regulating container (14) for dispensing insecticides (26) into an atmosphere including the following: a heat-regulating container (14) having a flat reservoir with insecticide (22), an interior bottom surface with interior side walls (unlabeled inner surface of 22), exterior outer surface of a lower surface (32), the interior surface of the lower surface (unlabeled inner surface of 22) of the reservoir portion (22). See col.4, lines 34-37, which teaches that the entire container is made from one piece with projections in figure 5 extending from the interior surface of the unlabeled lower surface of the container. The reservoir having a plurality of leg-like projections (col.4, lines 21-23), a heating device (10) with a heating surface (12) at elevated temperature adapted to receive the heat-regulating container (14) and the leg-like projections defining several air gaps (col.4, lines 34-37) between the lower surface of the reservoir portion and the heating surface of the heating device (10) for regulating heat transfer from the heating surface (figure 4:12) to the volatile material (figure 4:26). The Flashinski reference teaches convective heating, but fails to disclose that the leg-like projections are in direct contact with a heating surface (i.e., conductive

heating) and the exterior surface of the bottom is dimpled. The Encyclopedia Britannica discloses three known means of heating an object that are conduction, convection and radiation. Therefore, it would have been obvious to one having ordinary skill in the art to substitute the known convective heating means of the Flashinski reference with the known conductive heating means of Encyclopedia Britannica since such a substitution result in moving the heat from one object directly to another object (Encyclopedia Britannica Online, line 13).

With respect to claims 10, 18 and 20-21, the Encyclopedia Britannica reference fails to teach that exterior surface of the bottom of the container is dimpled; however, the Schiebelhuth reference, which is in the art of regulating direct heat for heating container, teaches a container (figure 3: 9) that its exterior bottom surface includes an indentation, i.e., a dimple (figure 3: 23). In addition, if one to look upside down at figure 1, of the Schiebelhuth reference, then 23 is a dimple. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the container of the of the Flashinski reference by substituting the leg-like projections in the bottom of the container with indentations, i.e., dimples as taught by Schiebelhuth reference so that the spatial arrangement of the abutment surface and the electric heating element are not congruent (col.8, lines 29-43).

With respect to claim 11, the Flashinski reference and the Encyclopedia Britannica reference both fail to that the exterior surface of the bottom is dimpled. The Schiebelhuth reference, which is in the art of regulating direct heat for heating container, teaches a container (figure 3: 9) that its exterior bottom surface includes an indentation, i.e., a dimple (figure 3:23). In addition, if one to look upside down at figure 1, of the Schiebelhuth reference, then 23 is a dimple. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the container of the of the Flashinski reference by substituting the leg-like projections in

the bottom of the container with an indentation, i.e., dimple as taught by Schiebelhuth reference so that the spatial arrangement of the abutment surface and the electric heating element are not congruent (col.8, lines 29-43).

With respect to claims 12-13, the Flashinski reference and the Encyclopedia Britannica reference both fail to disclose that the exterior surface of the bottom is dimpled. The Schiebelhuth reference, which is in the art of regulating direct heat for heating container, teaches a container (figure 3: 9) that its exterior bottom surface includes an indentation, i.e., a dimple (figure 3: 23). The indentation (figure 3: 22) has an intrinsic height such that the numbers and the heights of the dimples is a matter of design choice that is well within the scope of the artisan. In addition, if one to look upside down at figure 1, of the Schiebelhuth reference, then 23 is a dimple. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the container of the of the Flashinski reference by substituting the leg-like projections in the bottom of the container with indentations, i.e., dimples as taught by Schiebelhuth reference so that the spatial arrangement of the abutment surface and

With respect to claims 14-16, the Flashinski reference teaches the following: the closure means includes an impermeable film (col.3, lines 4-5), the closure means includes a semi permeable membrane (col.2, line 65) and the closure means includes a permeable membrane (col.2, line 65).

With respect to claim 17, the Flashinski reference teaches the container (22) includes a volatile insecticide material (26).

With respect to claim 19, the Flashinski reference and the Encyclopedia Britannica reference both fail to that the exterior surface of the bottom of the container is dimpled. The Schiebelhuth

reference, which is in the art of regulating direct heat for heating container, teaches a container (figure 3: 9) that its exterior bottom surface includes an indentation, i.e., dimple (figure 3: 23). In addition, if one to look upside down at figure 1, of the Schiebelhuth reference, then 23 is a dimple. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the container of the of the Flashinski reference by substituting the leg-like projections in the bottom of the container with indentations, i.e., dimples as taught by Schiebelhuth reference so that the spatial arrangement of the abutment surface and the electric heating element are not congruent (col.8, lines 29-43).

With respect to claim 22, the Flashinski reference teaches a series (uniformly distributed) of leg-like projections (in col.4, lines 21-23) such that the projections (30) extend from completely over the exterior bottom surface (32), but fails to teach that the exterior surface of the bottom of the container is dimpled. The Encyclopedia Britannica reference fails to teach that the exterior surface of the bottom of the container is dimpled. The Schiebelhuth reference, which is in the art of regulating direct heat for heating container, teaches a container (figure 3: 9) that its exterior bottom surface includes an indentation, i.e., dimple (figure 3: 23). In addition, if one to look upside down at figure 1, of the Schiebelhuth reference, then 23 is a dimple. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the container of the of the Flashinski reference by substituting the leg-like projections in the bottom of the container with indentations, i.e., dimples as taught by Schiebelhuth reference so that the spatial arrangement of the abutment surface and the electric heating element are not congruent (col.8, lines 29-43).”

///

Response To Arguments

5. The Examiner states: "Applicant's arguments filed on 04/14/2005 have been fully considered but they are not persuasive."

On page 12 of the Response section; applicant argues that, "the cited prior art references fail to teach a fiat reservoir with a dimpled lower surface for volatilizing insecticides." The newly applied reference, the Schiebelhuth, which is in the art of regulating direct heat for heating containers, teaches a container (figure 3: 9) that its exterior bottom surface includes an indentation, i.e., a dimple (figure 3: 23). In addition, if one to look upside down at figure 1, of the Schiebelhuth reference, then 23 is a dimple. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the container of the of the Flashinski reference by substituting the leg-like projections in the bottom of the container with indentations, i.e., dimples as taught by Schiebelhuth reference so that the spatial arrangement of the abutment surface and the electric heating element are not congruent (col.8, lines 29-43)."

Conclusion

6. The Examiner states: "The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Newsham reference (U.S.P.N. 14,271), the Legeros reference (U.S.P.N. 2,070,439) and the Adams reference (U.S.P.N. 3,466,424) all discloses dimpled bottom surfaces. The references are all in the art of heating."

///